

**STATE OF MISSOURI
PUBLIC SERVICE COMMISSION**

At a session of the Public Service Commission held at its office in Jefferson City on the 2nd day of August, 2023.

In the Matter of the Establishment of a Working)
Case for the Review and Consideration of) **File No. GW-2022-0060**
Promulgating a Rule Consistent with Section)
386.895

ORDER REQUESTING COMMENTS

Issue Date: August 2, 2023

Effective Date: August 2, 2023

On September 1, 2021, the Commission opened this working case to assist the Staff of the Commission (Staff) in its review and consideration of a rule. The Commission held a workshop on June 13, 2023, to gather information and hear from stakeholders about the issues surrounding renewable natural gas (RNG). On July 26, 2023, Staff requested that the Commission ask stakeholders for additional written comments and answers to specific questions to aid Staff in drafting proposed rules. Staff's questions are attached to this order as Attachment A. The Commission will grant Staff's request.

Stakeholders and the public are welcome to submit comments by forwarding electronic communications through the Commission's electronic filing and information system (EFIS) or by mailing written comments. You may submit electronic comments at the Commission's website at <http://www.psc.mo.gov>. Please refer to File No. GW-2022-0060. Written comments in hard copy should be addressed to the Secretary of the Commission at P.O. Box 360, Jefferson City, Missouri 65102 and should also

reference File No. GW-2022-0060. The comments and the contents of this file can be viewed by following the link at <http://www.psc.mo.gov>.

THE COMMISSION ORDERS THAT:

1. The Commission's Data Center shall provide a copy of this order to all counsel of record for gas corporations regulated by the Commission, and to the Office of the Public Counsel.
2. Comments from the public and interested stakeholders in answer to the questions in Attachment A shall be filed no later than September 18, 2023.
3. This order shall be effective when issued.



BY THE COMMISSION

A handwritten signature in black ink that reads "Nancy Dippell".

Nancy Dippell
Secretary

Rupp, Chm., Coleman, Holsman, Kolkmeyer
and Hahn CC., concur.

Dippell, Chief Regulatory Law Judge

Renewable Natural Gas Program

1. Should the Commission adopt separate rules regarding renewable natural gas (RNG) for biogas, hydrogen, and gas derived from waste CO₂? Please explain your reasoning.
2. Are there, or should there be, separate classifications of RNG facilities based upon feed stock (i.e. agricultural applications, landfill collection, etc.)? If so, how should those be defined?
3. Subsection 386.895.2, RSMo, states, in part: The commission shall adopt rules for gas corporations to offer a voluntary renewable natural gas program.
 - a. Does this statute authorize, but not require, a program applicable to customers who volunteer to participate?
 - b. Does this statute authorize, but not require, that utilities offer a program to generally inject biogas into the gas supply, the costs of which are borne by all customers of that utility whether or not a given customer volunteers to participate?
4. Subsection 386.895.5, RSMo, allows recovery of prudent, just, and reasonable qualified investment costs.
 - a. What factors should the Commission consider in determining prudence?
 - b. How will prudence be demonstrated prior to recovery?
 - c. Should prudence be determined in the rate adjustment mechanism (RAM) case, rate case, or some other or combination of cases?
 - d. How will prudence be determined for a voluntary program that is likely more costly than the traditional alternative and without a state or federal supply mandate?
 - e. What factors should the Commission consider in determining the justness?
 - f. Should justness be determined prior to recovery?
 - g. Should justness be determined in the RAM case, rate case, or some other or combination of cases?
5. What should be included as the minimum filing requirements for a RNG application?

- a. Should all applications include a demonstration that each *Tartan* criteria has been met?
6. In the workshop discussion, it was noted that some biogas facilities would generate the most biogas in summer months. However, much of the energy consumption would occur in winter months, especially for residential customers. How would a hypothetical RNG program match fuel consumption with actual fuel production?
7. What credits or certificates should be used to track volumes of RNG generated?
 - a. Are there current certification/crediting processes already in use, or should a certification specific to Missouri be developed? Please provide as much detailed information as possible regarding the certification/crediting process currently in use.
 - b. Please describe the current or proposed certification process, how ownership of credits is derived, and existing markets for RNG credits.
 - c. Do RNG credits expire? If so, please provide citations to regulations of the various credits including timeline from development of a credit to expiration.
 - d. Which entities will be credited with the renewable attributes (i.e. credits) of RNG within an Investor Owned Utility RNG program? Will those renewable attributes be transferrable?
 - e. What entity will be responsible for running and tracking the RNG credit system?
 - f. How should sales/transfers of RNG credits be handled?
 - i. What mechanism is appropriate to return those revenues to ratepayers or participants?
 - g. Should RNG credits expire? If so, when?
8. Please provide detailed explanations of the economics of current RNG facilities.
 - a. What are the primary revenue streams that support these facilities?
 - i. Please provide detailed estimates, with citations to the extent possible, of the market value of various products.
 - b. What equipment is necessary to construct a RNG facility by fuel source type?

- c. What are the ongoing costs of processing RNG to natural gas (NG) pipeline quality by fuel type?
 - i. Are there incremental investments/replacements necessary over the life of the facility? Please provide detailed explanations, timelines, and cost estimates for those investments.
 - d. What are the approximate costs for constructing a RNG facility by fuel source type?
 - e. Is RNG typically stored on-site, and if so, what is a typical storage amount based upon peak monthly production?
 - f. Provide estimates for the cost of pipeline or distribution system interconnection based upon various distances from RNG facilities.
 - g. Provide detailed explanations for RNG production quantities by feed stock type.
 - i. How does production from RNG facilities change based on variations from normal weather (i.e. colder than normal, warmer than normal, various precipitation levels, etc.)? Do those changes vary by feed stock?
 - ii. What is the typical variation for gas production (upper bound, lower bound, and confidence intervals if available)?
 - iii. How do various agricultural feed stocks impact RNG production (i.e. poultry, cattle, swine, vegetative, combination, etc.)?
 - h. What safety/security measures need to be installed at RNG facilities and what are the approximate costs for each measure based on facility size?
 - i. Should a RAM include any tax incentives? Why or why not?
9. Pipeline quality limits - questions for operators of natural gas transmission and distribution systems:
- a. Heating Value
 - i. What is the range of heating values of the natural gas your system currently receives? Please provide numerical values and specify the units (e.g. 950 to 1,200 BTU/dry standard cubic foot, at STP).
 - ii. In your opinion, what is an acceptable range of heating values if renewable natural gas is substituted for or blended with the natural

gas delivered to your system? (If different from the range for the natural gas your system currently receives, please explain the reason(s) for the differences.)

b. Water Vapor

- i. What is the maximum limit for water vapor in the natural gas currently delivered to your system? Please provide a numerical value and specify the units (e.g. 7 pounds of water vapor per MMcf).
- ii. In your opinion, what is a reasonable maximum limit for water vapor content if renewable natural gas is substituted for or blended with the natural gas delivered to your system? (If different from the limit for the natural gas your system currently receives, please explain the reason(s) for the differences.)

c. Impurities

- i. What are the maximum limits for the following listed impurities in the gas currently delivered to your system? Please provide a numerical value and specify the units (e.g. 1.0 grain of hydrogen sulfide per 100 cf).
 1. Hydrogen sulfide
 2. Total Sulfur
 3. Oxygen
 4. Liquid hydrocarbons
 5. Carbon dioxide
 6. Hydrogen
 7. Active bacteria or bacterial agents
 8. Hazardous or toxic substances
 9. Other
- ii. In your opinion, what are reasonable maximum limits for impurities if renewable natural gas is substituted for or blended with the natural gas delivered to your system? (If different from the limits for impurities in the natural gas your system currently receives, please explain the reason(s) for the differences.)
 1. Hydrogen sulfide
 2. Total Sulfur
 3. Oxygen
 4. Liquid hydrocarbons
 5. Carbon dioxide
 6. Hydrogen
 7. Active bacteria or bacterial agents
 8. Hazardous or toxic substances
 9. Other

- d. Do you have any additional suggestions related to gas quality limits if renewable natural gas is substituted for or blended with the natural gas delivered to your system?
10. Pipeline quality measurement questions for operators of natural gas transmission and distribution systems:
 - a. What are your current capabilities for monitoring gas quality of the natural gas transported in your pipeline system?
 - b. If renewable natural gas is substituted for or blended with the natural gas delivered to your system, which entities(s) should be responsible for monitoring gas quality:
 - i. The entity delivering the renewable natural gas to your system?
 - ii. The operator of the natural gas system?
 - iii. Other?
 11. What differences exist between interconnection at the LDC level versus interstate pipeline level?
 12. Do you have any further comments regarding specific topics that should be considered in the context of a RNG rule? Please provide as much information as possible and citations for supportive information, if available.

Hydrogen

1. Is your company or city currently considering projects that would include the use of hydrogen as a fuel?
 - a. If “yes”, what type(s) of projects are being considered?
 - b. If “yes”, is your city or company considering using a hydrogen blended with natural gas, 100% hydrogen, or other?
 - c. If “yes”, are you considering transporting hydrogen in existing natural gas pipelines?
 - d. If “yes”, are you considering building a dedicated pipeline network for purposes of transporting the hydrogen or hydrogen/natural gas blend?
 - e. If “no”, is the use of hydrogen as a fuel something that your company or city may consider using as a fuel in the future?

PGA Recovery

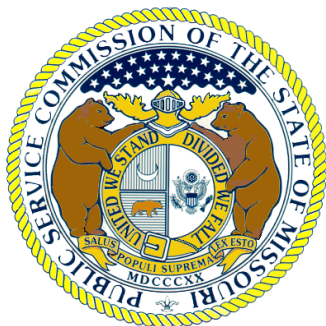
1. Is a LDC's purchased gas adjustment (PGA) mechanism impacted by the RNG statute/rule? Why or why not?
2. What are the issues related to PGA sales versus transportation customers (buying their own gas) with regard to RNG injections to the distribution system?

STATE OF MISSOURI

OFFICE OF THE PUBLIC SERVICE COMMISSION

I have compared the preceding copy with the original on file in this office and I do hereby certify the same to be a true copy therefrom and the whole thereof.

WITNESS my hand and seal of the Public Service Commission,
at Jefferson City, Missouri, this 2nd day of August, 2023.



Nancy Dippell

Nancy Dippell
Secretary

MISSOURI PUBLIC SERVICE COMMISSION

August 2, 2023

File/Case No. GW-2022-0060

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Enclosed find a certified copy of an Order or Notice issued in the above-referenced matter(s).

Sincerely,



**Nancy Dippell
Secretary**

Distributed to all council of record for gas corporations regulated by the Commission

Recipients listed above with a valid e-mail address will receive electronic service. Recipients without a valid e-mail address will receive paper service.